Upper Jones Tract Levee Break

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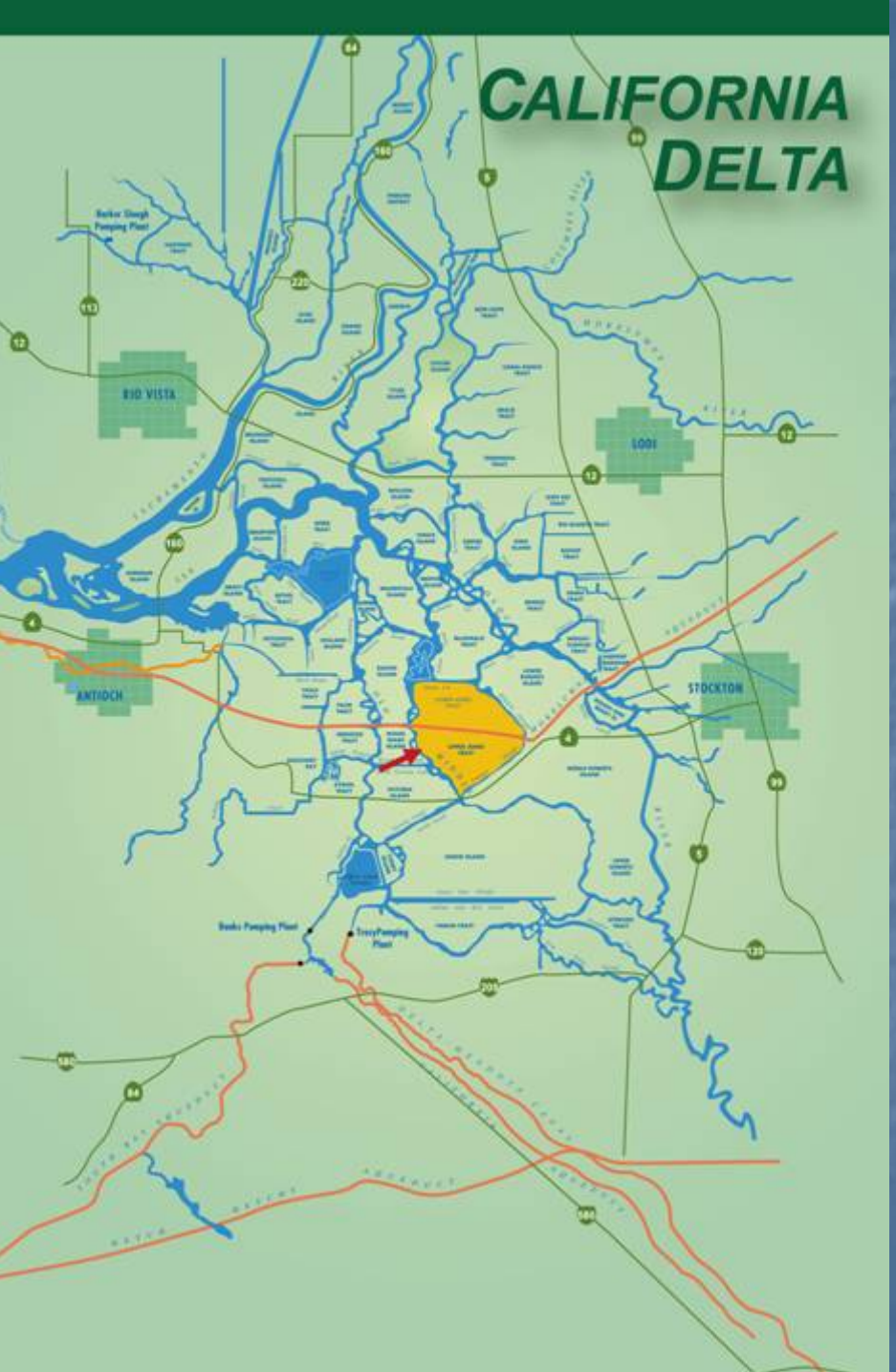
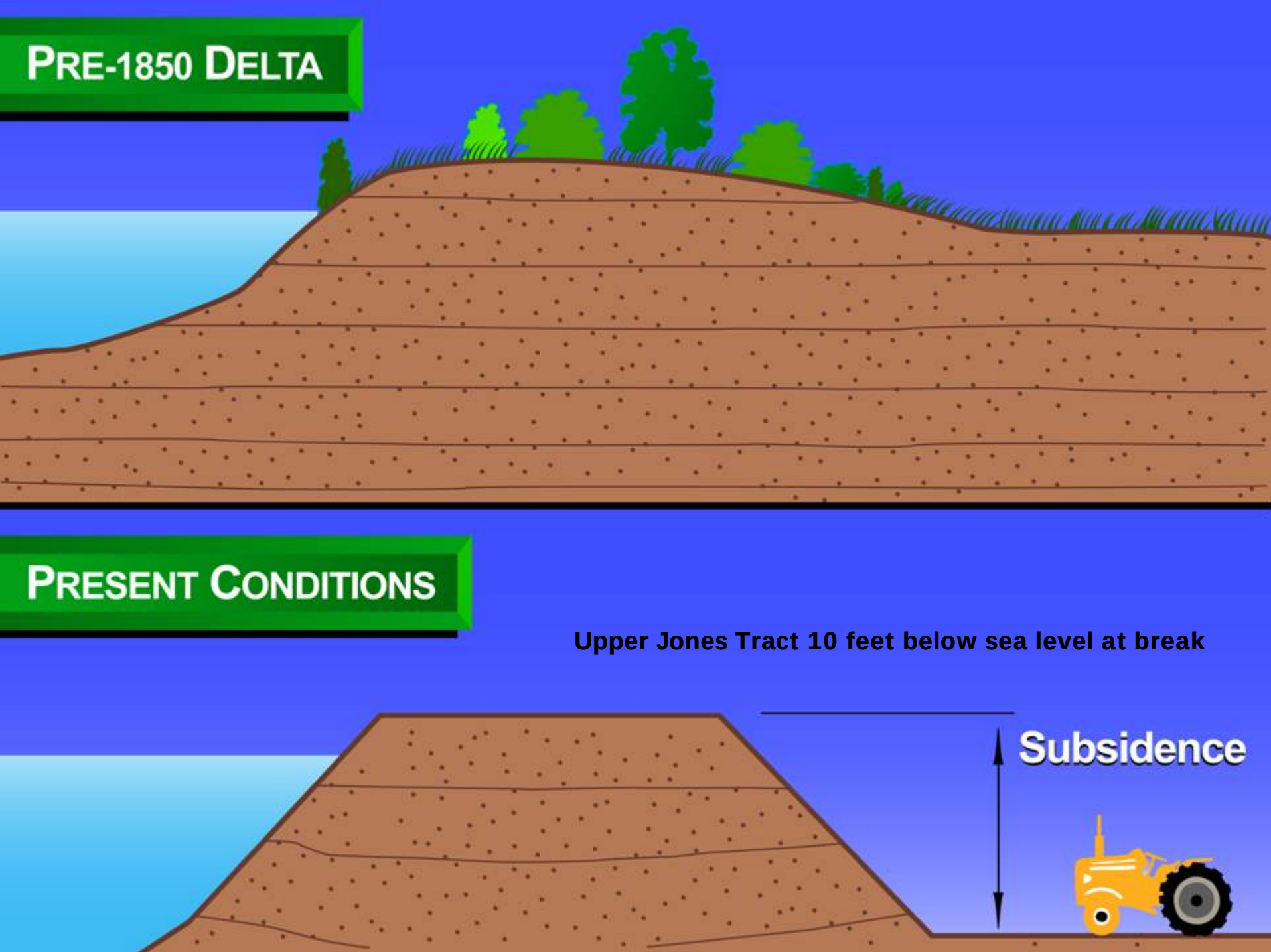


Breach occurred Thursday morning, June 3; flooded Upper and Lower Jones Tract

Breach occurred on Middle River


PRE-1850 DELTA
PRESENT CONDITIONS
Upper Jones Tract 10 feet below sea level at break
Subsidence

Causes of Levee Failures

- Overtopping
- Water side erosion
- Through-levee seepage (tree roots, burrowing animals)
- Foundation defects
- High tides sometimes a factor

- No clear cause in this case.

What Is Affected

- About 70 people evacuated
- About 40 structures inundated
- 11,000 acres flooded ($9.8M crop loss)
- Burlington Northern Santa Fe Railroad crosses island (freight and Amtrak)
- Mokelumne Aqueduct crosses island
- Petroleum pipeline crosses island
- State Highway 4 is nearby
- SWP / CVP

Floodwater enters island, 6/4

Expanding floodwater, 6/4

The break; note rip rap

Water rises toward farm

Water rises toward farm

Railroad trestle separating Upper and Lower Jones Tract, 6/4

Railroad trestle damaged, 6/6

Grain silos, cell tower inundated

Mokelumne Aqueduct parallels railroad

Governor visits site, 6/5

Wind-generated waves erode levees, imperil Highway 4

Trapper Slough levee raised 6 feet

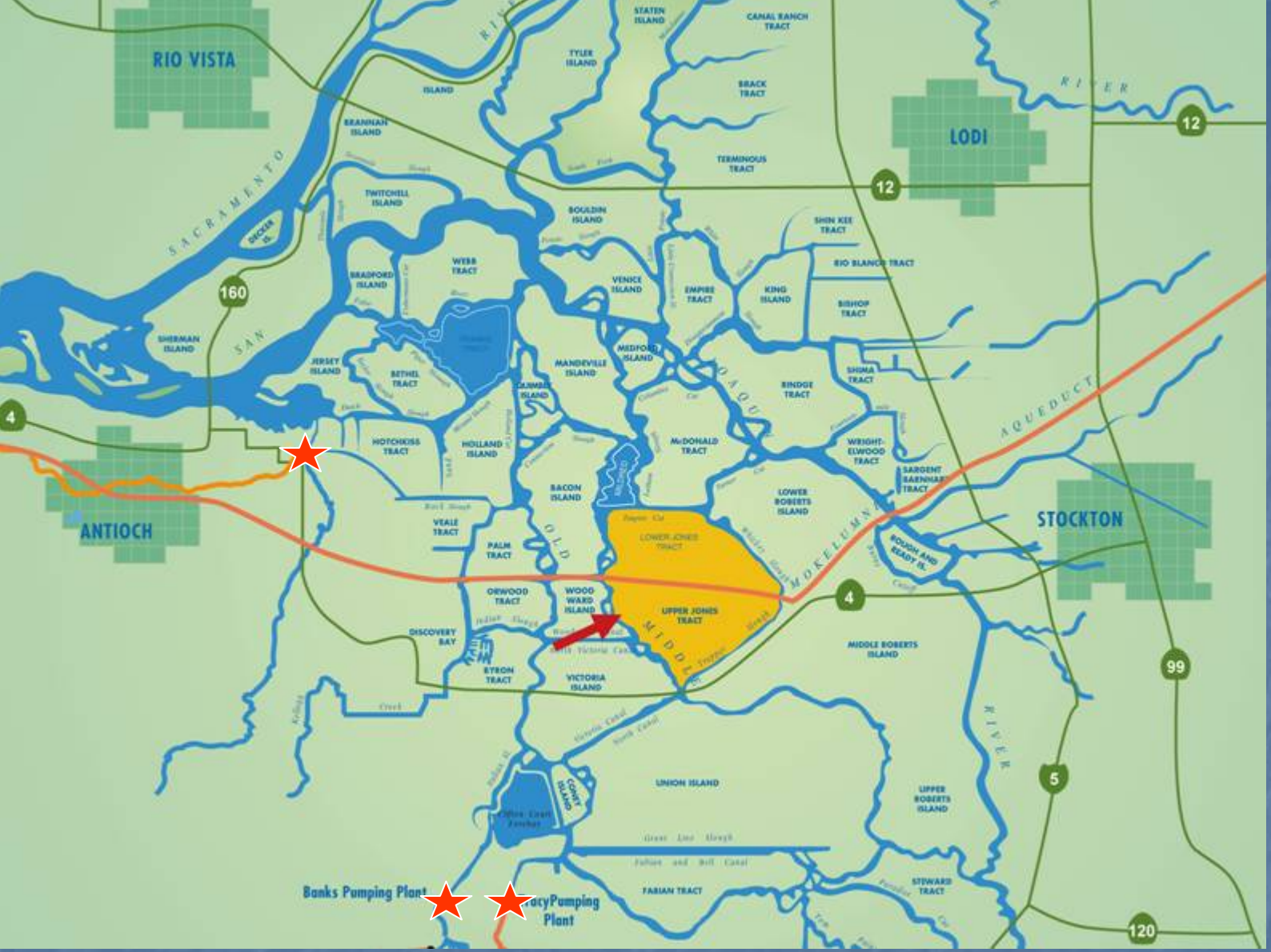
Trapper Slough levee work

Erosion of newly-placed material

Armoring the raised levee

Effect on Water Quality

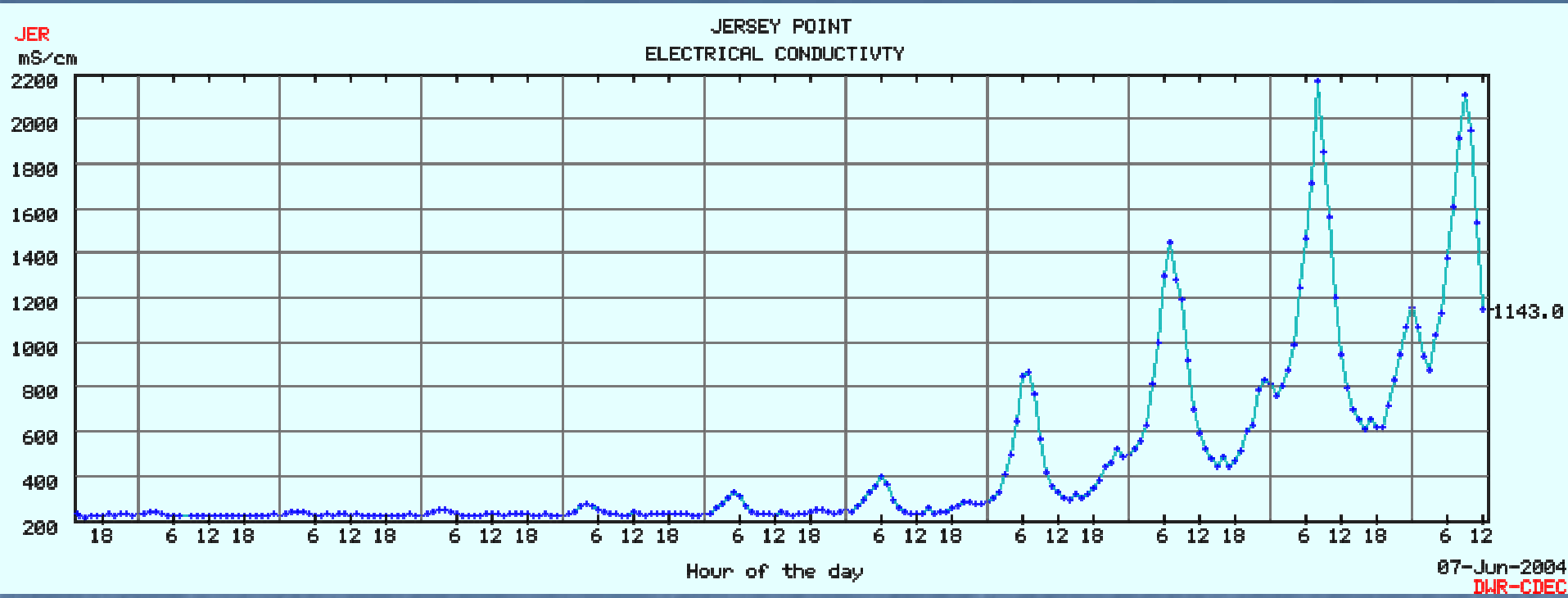
- Rush of water may carry salt upstream from bay
- DWR monitors salinity at over 20 sites throughout the Delta
- Salinity is a concern for drinking water, irrigation
- Farm fuel tanks on island could rupture



Locations of major drinking water intakes

Water Quality Actions, Status

- CVP increased releases from Shasta to repel salt
- Delta Cross Channel gates opened to move fresh water to interior of Delta
- SWP, CVP curtailed pumping
- Salinity has increased to levels normally seen in late summer; DWR modeling future salinity changes
- CVP and SWP working to manage Delta salinity



Salinity at Jersey Point
May 28 to June 7

Government Agency Roles

- **Governor** declared state of emergency in San Joaquin Co. June 4
- Local landowner **reclamation district** owns and maintains levee
- **San Joaquin County** is providing emergency relief, security, support
- **Office of Emergency Services** is coordinating efforts
- **DWR** has flood fight role, has signed contract to close the levee break, working to protect interior levee slopes
- **Army Corps of Engineers** signed emergency assistance agreement with DWR on June 4 to raise 13,000 feet of Trapper Slough levee
- **CalTrans** assisting with Trapper Slough levee protection, rock placement
- **CHP** providing security
- **CCC** and **CDF** providing work crews – 250 people

Repair Process

- Protect ends of levee break from further erosion (done)
- Wait for water level to stabilize (done)
- Protect inside of levees from erosion (in progress)
- Close breach (could take 45 days)
- Pump water from island (could take 90 days)
- Remove silt, re-level land, clean up debris (much farmland could be ready for use spring 2005)

Rock is placed at levee ends

Plastic is placed to prevent erosion

Placing plastic to control erosion (file photo)

Long Term Levee Funding

- State provides subventions to help local reclamation districts
- Funding barely covers routine maintenance; little repair or upgrading
- Levee funds included in proposed CALFED “beneficiary pays” user fee

Delta Levee Program History

1973 **SB 541 (Way Bill)**

Financial Assistance

1988 **SB 34**

Intent to fund $120 million over 10 years
"No net loss of habitat"

1991 **SB 1065**

$ 3 million to DFG for mitigation

1996 **AB 360**

Extended SB 34 to 2006
Added "Net Habitat Enhancement"

2006 **Program Expires**

Delta Levee Program Funding

1973 - 2003	**General Fund**
	$ 106 Million
1996	**Prop 204**
	$ 25 Million
2000	**Prop 13**
	$ 30 Million
2003	**Prop 50**
	$ 70 Million
2005 ?	**CALFED 10 Year Finance Plan**
	$ 400 Million
2006	**Funding Expires**

The Flood Management Challenge

- Stable, long-term funding is needed to prevent periodic catastrophe
- Deferred work has made challenge greater
- Funding for Delta levees, perhaps Suisun Marsh, addressed in CALFED user fee
- Non-Delta flood management needs are separate